### A Summary Research on Chinese Women's Competitive Taekwondo

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**Abstract:** In recent years, women's taekwondo has made brilliant achievements in the International arena of the Olympic Games. As an official event of the Olympic Games, taekwondo has attracted the attention of the world, while the academic circles of sports pay more and more attention to its theoretical level In order to promote the further development of Women's Taekwondo in China and explore the causes of the development of women's taekwondo in modern China, this paper made statistics and sorting out the relevant literature of women's taekwondo from 2010 to 2020, and found that the main research contents of taekwondo in recent ten years are: technical characteristics of taekwondo athletes, competition rules, taekwondo skills and tactics, etc Therefore, women's Taekwondo has great development potential. This paper provides more ideas for the researchers behind, and creates a better development platform for Chinese Taekwondo.

#### 1. Introduction

Taekwondo, as a martial art of South Korea, is praised as "national skill" by South Koreans. Taekwondo was adopted as a performance event at the 1988 Seoul Olympic Games, and then Taekwondo was designated as an official event at the 2000 Sydney Olympic Games at the 1994 IOC meeting<sup>[1]</sup> The results of official data show that nearly 100 million fans in the world have participated in Taekwondo activities. Under this trend, China's women's Taekwondo has become a key event in the Olympic Games. Due to the constant changes of rules, the development of women's Taekwondo is slow, and it is necessary to ensure the "perfect" physical function of athletes "At the same time, strengthening the monitoring of physical function indicators, the improvement and improvement of athletes' scoring technology under the new rules, the relationship between coaches and athletes, and the selection and training of reserve talents can make athletes keep pace with the times, advance bravely, further improve the economic level, and lay a solid foundation for winning gold medals in the Olympic Games. This paper focuses on the exploration of women's Taekwondo The influencing factors of Taekwondo project development, such as personal technical and tactical research, competitive competition rules research, reserve talent selection and training research, etc., lay a good foundation for the later research of women's competitive Taekwondo project and add color to the development of China's competitive sports.

#### 2. Analysis of Developme Status of Women's Competitive Taekwondo

## 2.1 Quantitative Analysis of Research Literature on Women's Competitive Taekwondo from 2010 to 2020

This platform, which included ten thousand journal of literature retrieval, primarily in the

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women's taekwondo keywords, to sports key journals and professional sports colleges and universities master's thesis as the main basis of reference<sup>[2]</sup>, the search range is from 2010 to 2020 years in the last decade about the document of tae kwon do all aspects of research By collating The literature found that the total literature volume of women's Taekwondo was 430. After screening, 410 literatures were finally obtained, including 56 literatures in core journals, accounting for about 12%, and 19 literatures in foreign journals. Through the literature analysis, it can be known that the literatures published in Chinese and foreign journals of women's Taekwondo have been increasing year by year, from 2015 to 2016 The taekwondo literature from 2019 to 2020 is the lowest value in the past decade. The research results show that the research on women's taekwondo at home and abroad is mainly carried out around the Olympic Games, and the phenomenon of decline in 2019 to 2020 is mainly due to the reasons The postponement of Tokyo Olympic Games<sup>[3]</sup> has not raised the research interest. However, the number of taekwondo master and doctoral theses published in China is still very small, especially the number of doctoral theses is very few, so the in-depth study of Taekwondo needs further exploration.

#### 2.2 Analysis on the Research Theme of Women's Competitive Taekwondo from 2010 to 2020

Through the retrieval of relevant literature on wanfang platform of China National Knowledge Knowledge Network, it is found that the technical and tactical research of women's competitive Taekwondo in recent years is the main direction of domestic research, including the analysis of athletes' technical characteristics [4] Research on the technical and tactical research of leg<sup>[4-5]</sup> The change of scoring technology under the new rules<sup>[6]</sup> Reserve talent selection and training<sup>[7]</sup>, and correlation studies mainly focus on the quad-year Olympic Games. To a certain extent, China's Taekwondo has developed, but the Tokyo Olympic Games was postponed due to the epidemic, resulting in the slow development of taekwondo research. Secondly, taekwondo influence literature accounts for a large part in the core journal literature, analysis of the domestic research more and more attention to the impact of Taekwondo on the national society and individuals; However, the research scope of other types of core journal literature is relatively complex. Although it broadens the research direction, fewer people are involved in the research, which is not conducive to systematic research.

# 3. Analysis of the Main Contents of Literature Research on Women's Competitive Taekwondo

#### 3.1 Study on Scoring Technique of Female Athletes under New Rules

After the 2016 Rio Olympic Games, the World Taekwondo Federation has greatly revised the competition rules, especially made some adjustments in the score. In order to adapt to the changes of competition rules in the new cycle of Tokyo Olympic Games, China Taekwondo Association has re examined and approved the Taekwondo competition rules (hereinafter referred to as the new rules)<sup>[5]</sup>.Competitive competition rules are an important part of competitive sports<sup>[8]</sup>. With the emergence of the new rules of Taekwondo, the score of hit points in the competition has changed, which is one of the important factors promoting the continuous progress and development of competitive Taekwondo in recent years. After the promulgation of the new rules, the changes are mainly aimed at the low initiative of athletes in previous taekwondo competitions Some changes that are not confrontational. In Yun handi's paper, he believes that the change of score will stimulate and force Taekwondo athletes to take the initiative to develop their own technology in an all-round way, especially the coordinated development of five physical qualities, which plays a great role in improving athletes' competitive ability<sup>[9]</sup>. Zhang Ting believes that the improvement of rotation additional score will promote the continuous increase of athletes' technical and tactical application level, and more difficult movements will be used. She puts forward that athletes should pay attention to the training of tactical ability and technical ability [10]. He Yun believes that the implementation of the new rules increases the types of application of Li daxun's leg techniques, keeps him in a continuous attack high-pressure situation in the game, and helps to enhance the application ability of habitual techniques and tactics and optimize the overall technical and tactical system <sup>[11]</sup>. The promulgation of the new rules has made substantial changes in athletes' competition techniques and tactics. Now most excellent athletes mostly adopt push kick, front cross kick, back cross kick, fist, down split, double flight, swing kick and back spin kick. Due to different technical characteristics, the combination of multi leg methods greatly enriches the comprehensiveness of competition techniques. At the same time, it strengthens the athletes' offensive enthusiasm, facilitates the athletes to use the "unique skill" technology, and lays the foundation for effective scoring.

#### 3.2 Research on Women's Competitive Taekwondo Skill and Tactics Training

Taekwondo competitive training is an extremely important part of Taekwondo project. The domestic research on Taekwondo techniques and tactics accounts for the main part of Taekwondo training research. The vast majority of Taekwondo related research is mainly carried out around techniques and tactics. Therefore, the literature research in this area roughly represents the main direction of competitive Taekwondo training research in China. Feng ran believes that the current research on competitive Taekwondo in China still focuses on the research on techniques and tactics, rule changes and training methods, ignores the research on coaches, and the development of practice is not closely related to theoretical research<sup>[12]</sup>. Liu Dingwei believes that at present, China's Taekwondo projects are preparing for the Tokyo Olympic Games. The training of athletes should innovate the management system, improve the training mode, and rely on today's scientific and technological strength to improve the athletes' competitive ability<sup>[13]</sup>. Dong kunwei found through the experimental control method that the suspension training method can greatly improve the core ability of Taekwondo and the training of rotating leg [14]. Sun Maojun believes that at present, the training of reserve talents of competitive Taekwondo in China also needs to develop the training system of competitive Taekwondo from the aspects of improving the management system of competitive Taekwondo, improving the selection mechanism and promoting the quality improvement of coaches and athletes [15]. Most of the above views focus on the Olympic Taekwondo competition training, world championships and other major events. There are still deficiencies in how to scientifically and systematically prepare for the Olympic Games, athletes' technical and tactical training [16], talent selection and training [17]. At present, the mainstream of research is mainly about how to improve athletes' technical and tactical level, but there is still little research on coaches, In order to effectively improve the theoretical and practical research of relevant Taekwondo, we need to pay attention to interdisciplinary integration<sup>[18]</sup>, so as to provide theoretical basis and basis for further relevant Taekwondo research, and create a good platform for athletes and coaches to improve their professional level.

#### 3.3 Study on Taekwondo Arena Change

Under the new rules[7], the Taekwondo competition venue becomes smaller and the athletes' activity score range is reduced. The change of the area and shape of the field not only has an important impact on the formation and development of techniques and tactics, but also puts forward higher requirements for the use of athletes' psychology and techniques and tactics. Xue Tingting believes that the change of venue specifications will make the competition more intense and confrontational, and the athletes' initiative and aggression will be strengthened, which will help to promote the sustainable development of Taekwondo<sup>[19]</sup>. Yu Zhenhao believes that with the change of the field area, the athletes' technical and tactical application in the corners will be paid attention to, the continuous antagonistic attack will increase, and the viewing value of the competition will be improved. At the same time, he points out that athletes need to further strengthen their physical and mental quality<sup>[20]</sup>. Wang Yong believes that the continuous revision of the new rules requires referees to deeply study and study the new rules and continuously improve their own level of execution; The change of venue increases the probability of conflict among athletes, which requires the improvement of referees' response ability to on-the-spot judgment<sup>[21]</sup>. The change of the field is a great test for the coaches' teaching level and the players' technical and tactical play. The impact of the field change is mainly discussed from the aspects of cultivating active offensive athletes, the application of new field technical and tactical, and the improvement of coaches' teaching ability. Overall, taekwondo scores have also changed greatly according to the changes of and venues<sup>[22]</sup>. The application of combined leg method, the improvement of physical quality, the use of new techniques and tactics in simulated competition and active attack have become the focus of current research. By sorting out the literature, it is found that after the change of venue rules, there is still relatively little research on Athletes' psychological research and efficient scoring of technical and tactical use, which is not conducive to athletes' scientific and systematic training<sup>[23]</sup>. Therefore, for the change of venue, coaches and athletes need to adapt to all aspects of influence in training and competition in time<sup>[24]</sup>. Therefore, through the investigation and research of the new venue, we can analyze the competitive level of excellent athletes, so as to ensure that taekwondo athletes and coaches can actively adapt to the changes of the new venue under the new rules, so as to provide training theoretical basis and relevant guidance<sup>[25]</sup>.

#### 3.4 Study on the Development Trend of Taekwondo

With the development of The Times, taekwondo project development is hot rising development trend, with the development of the Olympic Games every four years, taekwondo project is basically well-known, for this country Social policy's support vigorously, the sports not only promoted the development of social economy<sup>[26]</sup>, make people more understanding of competitive sports and actively participate in sports activities, and showed a strong comprehensive strength in China Under the promotion of national social tae kwon do project formed under the upper Olympic taekwondo project middle manufacturing and services the lower mass social promotion Taekwondo occupies a place in China's sports industry<sup>[27]</sup>, and has a huge potential for development, but the economic industry chain of Taekwondo is not perfect, there are deficiencies in brand innovation The situation of industry training institutions has not been effectively improved, leading to the taekwondo industry can only bring short-term economic value benefits, which is not conducive to long-term development benefits, and it is not convenient to carry out literature research in this area<sup>[28-32]</sup>.

#### 4. Conclusion

From the above knowledge, there are obvious limitations in the research of women's competitive taekwondo. The research on taekwondo should not be limited to a certain field, but should be adapted to the trend of The Times and effectively expand the research scope through the combination of theory and practice, and timely and in-depth study of other new events, such as Pintae Acrobatics taekdance The reflection and summary of different events can make use of the knowledge of different disciplines in the research process of taekwondo and deepen the practice of taekwondo. At the same time, the country's social should pay attention to the selection and training of employment of coaches, athletes, mainly studies the coaches coaching moral level and the level of the movement of athletes, the national government authorities need to guarantee the relevant rights and interests of the athletes, encourage and support the athlete's own benign development, make the athletes worry-free, single-minded contribute to the nation Finally, it is necessary for relevant departments to maintain the market order of taekwondo and strengthen the management of civil competitions. It is suggested that the trainers of private taekwondo training institutions conduct qualification inspection and on-the-job training to provide effective guarantee for teaching quality.

#### References

- [1] Yang Mingliang. Analysis on the historical roots of Taekwondo in Korea[J]. Shandong sports science and technology, 2014, 36(05):34-36
- [2] Xu Jin.Research on the development of Chinese Taekwondo in recent ten years[J].Martial arts research,2021,6(10):105-107
- [3] Wu Lanxin.Research on the preparation strategy of Taekwondo after the extension of the Tokyo Olympic Games[J].Boxing and fighting,2021(06):82-83

- [4] He Yun, Gao Ping, Hu Yihai. Analysis of technical characteristics of world women's Taekwondo during the Tokyo Olympic cycle [J]. Chinese sports coaches, 2020, 28(01):34-36
- [5] Zhu Linfang. Analysis of technical characteristics of Asian women's Taekwondo scoring under the new rules[J]. Sporting goods and technology, 2019(10):249-250
- [6] Wang Dan, Wu Jianzhong, Wu Suying, Kong Jiamin. First score characteristics of World Taekwondo elite athletes[a]. Chinese society of Sports Sciences. Compilation of abstracts of papers at the 11th National Sports Science Conference [C]. Chinese society of Sports Sciences: Chinese society of Sports Sciences, 2019:2
- [7] Wu Zhibing. Analyzing the main body shape and material selection of female Taekwondo elite athletes[J]. Contemporary sports science and technology, 2018, 8(29):249+251
- [8] Tian Maijiu, Liu Daqing. Sports training [M]. Beijing: People's Sports Publishing House, 2012
- [9] Yun handi.Study on the impact of new Taekwondo rules on technology application in 2018[D]. Harbin:Harbin Institute of physical education,2020
- [10] Zhang Ting.Research on the application of techniques and tactics of elite female athletes under the revision of Taekwondo competition rules[D].Beijing:Beijing University of physical education, 2016
- [11] He Yun, Pang Junpeng. Development trend of men's Taekwondo techniques and tactics from the perspective of new rules--Taking world champion Li daxun as an example [J]. Journal of Wuhan Institute of physical education, 2019 (12):82-87
- [12] Feng ran. Analysis on the research and development trend of competitive Taekwondo in China[D]. Shenyang: Shenyang Institute of physical education, 2020
- [13] Liu Dingwei, Pang Junpeng, Sun Yi, et al. Gold medal winning situation and preparation strategy of key athletes of China's Taekwondo team for the Tokyo Olympic Games [J]. Journal of Hebei Institute of physical education, 2020 (05):55-60
- [14] Dong kunwei,Xue Xinxuan,Zeng Bingxi.Influence of suspension training on the special technical ability of Taekwondo rotating leg[J].Journal of Shandong Institute of physical education,2019(05):90-95
- [15] Sun Maojun, Yang Na, Wang Lili. Research on the training of reserve talents of Taekwondo in Beijing[J]. Sports culture guide, 2014(02):19-22
- [16] Zhu Jing.Research on technical characteristics of world elite competitive Taekwondo Athletes in the process of attack and defense transformation[D].Beijing University of physical education, 2016
- [17] Bu Jing.Research on the training countermeasures of competitive Taekwondo reserve talents[J]. Sporting goods and technology,2021(20):141-142
- [18] Long bin, Wang Junjie, Li Fang. Review and Prospect: a review of women's competitive sports research in China[J]. Journal of Wuhan Institute of physical education, 2021, 55(06):72-78
- [19] Xue Tingting,sun Guoyou,Lu Yulin.Study on the evolution law and motivation of Taekwondo competition rules in recent ten years[J].Journal of Nanjing Institute of physical education,2020(02):65-70
- [20] Yu Zhenhao.Study on the influence of venue change on techniques and tactics in Taekwondo competition rules[D].Beijing:Beijing University of physical education,2017
- [21] Wang Yong, Shi Manman. Impact of the implementation of new Taekwondo rules on referees [J]. Journal of Lanzhou University of Arts and Sciences (NATURAL SCIENCE EDITION), 2017(01):100-104

- [22] Lin Dashan, Gao Zhihong. Analysis on application characteristics of winning scoring technology in women's Taekwondo competition under the new rules [J]. Journal of Wuhan Institute of physical education, 2020, 54(12):89-94
- [23] Ren Dandan,Fu Yi,Chen Bolin,Guo Daqian.Research on the use of women's Taekwondo techniques and tactics based on the change of competition rules[J].Liaoning Sports Science and technology, 2020,42(06):100-104
- [24] Zhao Zhenlei.On the development status and Countermeasures of Taekwondo in China[J]. Research on innovation of ice and snow sports,2020(12):105-106
- [25] Li Ting. Analysis of front leg techniques and tactics of Chinese elite female Taekwondo athletes[D]. Wuhan Institute of physical education, 2020
- [26] Liu Yinchen.Research on the development of tactical characteristics of elite female Taekwondo Athletes in the Olympic Games[J].Sports fashion,2020(05):224
- [27] Lu Xiudong.Research on the success factors of Chinese women's Taekwondo[a].Chinese society of Sports Sciences.Compilation of abstracts of papers at the 11th National Sports Science Conference[C].Chinese society of Sports Sciences:Chinese society of Sports Sciences,2019:2
- [28] Liu Yinchen.Research on the development of head striking technical characteristics of elite female Taekwondo Athletes in the Olympic Games[J].Sports fashion,2019(11):4-5
- [29] Xu Mei.Analysis on technical and tactical characteristics of Zhou Lijun,an excellent female Taekwondo Athlete in China[J]. Sports science and technology, 2019, 40(05):3-4
- [30] Li Shenghong, Hao Xiaoli, Ma Zhenhua. Analysis and Research on the back spin kick technology of China's elite female Taekwondo athletes [J]. Sporting goods and technology, 2017(22):185-186
- [31] Zhang Shaogang. The impact of Taekwondo rule changes on the technical application of Chinese female athletes [D]. Shenyang Institute of physical education, 2017
- [32] Chu Xiaohui. Analysis of tactical characteristics of elite female Taekwondo athletes [J]. Sporting goods and technology, 2017(16):161-163